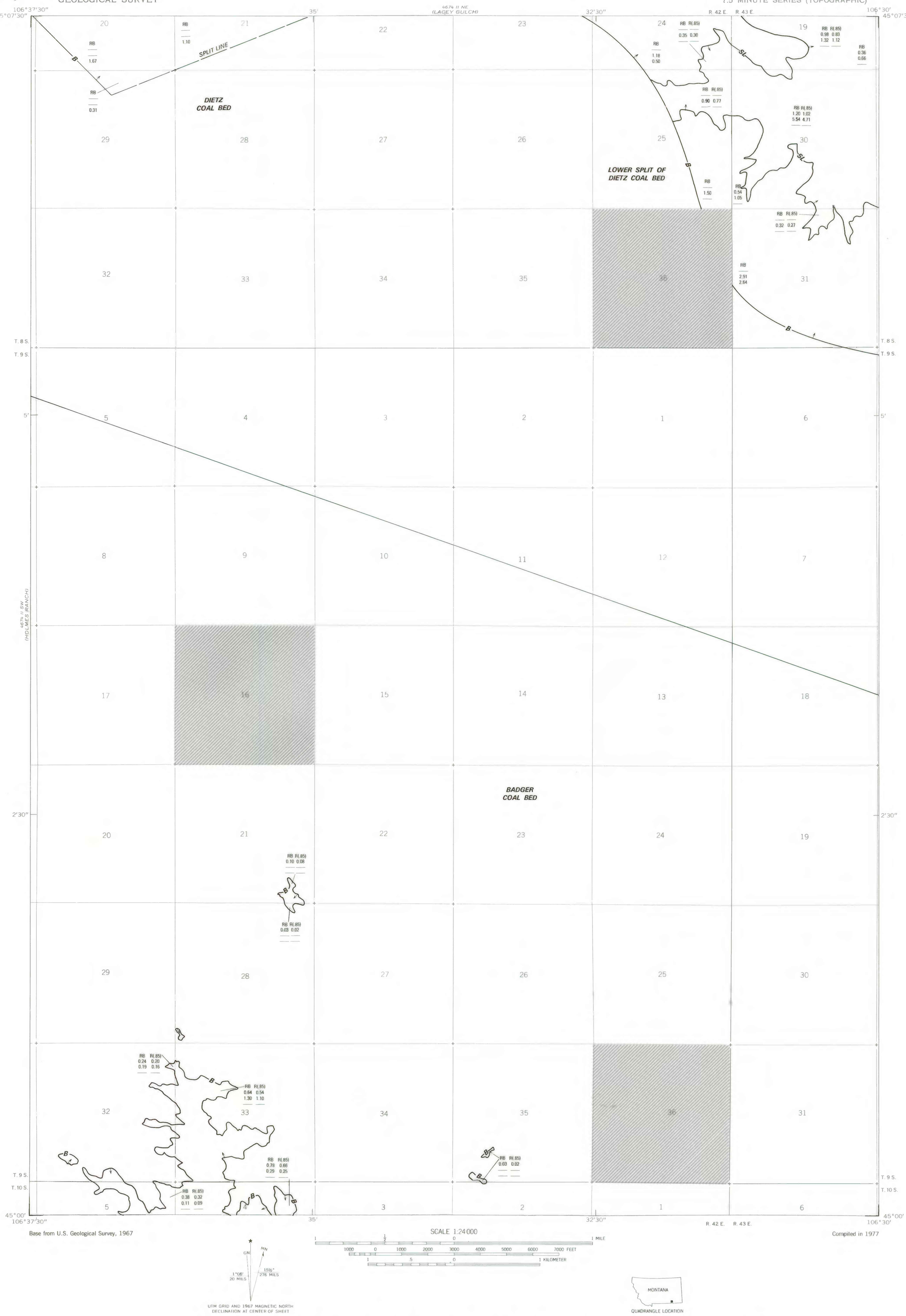
UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

PINE BUTTE SCHOOL QUADRANGLE
MONTANA—BIG HORN CO.
7.5 MINUTE SERIES (TOPOGRAPHIC)



Base from U.S. Geological Survey, 1967

SCALE 1:24000

1 MILE
7000 FEET
1 KILOMETER

GN MN
1°06'
20 MILS
15½°
276 MILS

UTM GRID AND 1967 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

QUADRANGLE LOCATION

Compiled in 1977

OPEN-FILE REPORT

This report has not been edited for conformity with U.S. Geological Survey editorial standards or stratigraphic nomenclature.

OPEN-FILE REPORT 78-652

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EXPLANATION

NON-FEDERAL COAL LAND--Land for which the Federal Government does not own the coal rights.

B

BOUNDARY OF RESERVE BASE COAL--Drawn along the outcrop of the coal bed, the contact between burned and unburned coal, and the fault boundary of the coal where the coal bed is 5 feet (1.5 m) or more thick; and the 5-foot (1.5 m) coal isopach. Arrows point toward area of Reserve Base coal.

SL

STRIPPING-LIMIT LINE--Boundary for surface mining of the coal bed (in this quadrangle, the 200-foot-overburden isopach). Arrows point toward the area suitable for surface mining. Recovery factor of 85 percent within that area in this quadrangle.

RB R(.85)
0.98 0.83 (Measured resources)
1.32 1.12 (Indicated resources)
— — (Inferred resources)

IDENTIFIED STRIPPABLE COAL RESOURCES--Showing totals for Reserve Base (RB) and Reserves (R), in millions of short tons, for each section or part(s) of section of Federal coal land within the stripping-limit line. Dash indicates no resources in that category. Reserve Base (RB) x the Recovery Factor (85 percent) = Reserves (R).

RB
— (Measured resources)
— (Indicated resources)
1.67 (Inferred resources)

IDENTIFIED NON-STRIPPABLE COAL RESOURCES--Showing totals for Reserve Base (RB), in millions of short tons, for each section or part(s) of section of Federal coal land outside the stripping-limit line. Dash indicates no resources in that category.

Coal resources in partial sections along eastern margin of quadrangle are included in totals of adjacent sections to the west.

Recovery factors have not been established for underground development of coal in this quadrangle. Therefore, Reserves (R) were not calculated for the coal bed in areas outside the stripping-limit line where the overburden thickness exceeds 200 feet (61 m).

To convert short tons to metric tons, multiply by 0.907.

To convert feet to meters, multiply by 0.3.

COAL RESOURCE OCCURRENCE AND COAL DEVELOPMENT POTENTIAL MAPS OF THE PINE BUTTE SCHOOL QUADRANGLE, BIG HORN COUNTY, MONTANA

By
W. C. CULBERTSON, L. N. ROBINSON AND T. M. GAFFKE

1978

PLATE 23
IDENTIFIED RESOURCES OF THE DIETZ COAL BED AND THE BADGER COAL BED